

Virginia Department of Environmental Quality Office of Operator Training



**Process Control and Laboratory
Workshop Schedule
Winter - Spring 2007**

Department of Environmental Quality

| Course # | Title | Location | Dates | Times | Maximum Enrollment | Fee |
|----------|--|--|----------------------|-------------------|--------------------|-------|
| DEQ 15 | Extended Aeration Package Plants | DEQ - West Central RO Roanoke VA | Feb 27 – Mar 1, 2007 | 8:30 AM – 4:30 PM | 16 | \$150 |
| DEQ 18 | Introduction to BNR (Biological Nutrient Removal) | Town of Onancock Onancock, VA | April 10 – 11, 2007 | 8:30 AM – 4:30 PM | 12 | \$100 |
| DEQ 18 | Introduction to BNR (Biological Nutrient Removal) | Augusta County SA – Government Center Verona, VA | May 8 – 9, 2007 | 8:30 AM – 4:30 PM | 30 | \$100 |
| DEQ 19 | Basic Lab Skills for Wastewater Operators | DEQ Piedmont Regional Office Glen Allen, VA | May 16 – 17, 2007 | 8:30 AM – 4:30 PM | 20 | \$100 |
| DEQ 18 | Introduction to BNR (Biological Nutrient Removal) | DEQ West Central Regional Office Roanoke, VA | June 5 - 6, 2007 | 8:30 AM – 4:30 PM | 30 | \$100 |

Course descriptions are provided on the back of the page.

Course Descriptions

DEQ - 15 Extended Aeration Package Plants **Registration Fee: \$150**

Training Credits: 1.3

A two and a half day program designed to introduce procedures available to evaluate and control an extended aeration package plant treatment system. Program will include lecture, class exercises, hands on activities and visits to one or more typical extended aeration package treatment plants. Topics covered during the program include treatment system components, normal operation, useful process control observations, sampling and testing (such as dissolved oxygen, pH, 30 & 60 minute sludge settleability) and a brief discussion of other, more advanced tests (such as mixed liquor suspended solids and microscopic evaluation of the activated sludge). The class will also cover basic process control calculations and helpful information for identifying and correcting operational problems. Students will perform the subject tests and use the information collected to evaluate process condition. The program will include data interpretation and basic troubleshooting. The program is recognized by the State Board for Waterworks and Wastewater Works Operators.

DEQ - 18 Introduction to BNR (Biological Nutrient Removal) **Registration Fee: \$100**

Training Credits: 1.2

This two day workshop provides an introduction to the principles involved in biological nutrient removal. The focus of the program will be the suspended growth (activated sludge) BNR processes. If you operate or manage a treatment system which includes biological nutrient removal or will be required to implement biological nutrient removal, this program will be helpful. The program will discuss the basic concepts associated with biological nutrient removal (nitrification, denitrification and biological phosphorus removal). It will identify performance factors, provide typical operating ranges for many of these factors and review various design and operational configurations currently being used for BNR. Based on availability, the program will include one or more site visits to facilities currently achieving full or partial BNR. The program is recognized by the State Board for Waterworks and Wastewater Works Operators.

DEQ – 19 Basic Lab Skills for Wastewater Operators **Registration Fee: \$100**

Training Credits: TBA

This two day workshop provides hands on instruction in the basic skills required to accurately perform wastewater related sampling and testing. If you are responsible for conducting your facility's sampling and testing, this program will be extremely beneficial. The program covers lab water sources, equipment selection, equipment and glassware cleaning and storage, and the collection and preservation of representative samples. The program also includes hands-on experience in using glassware and lab instruments to dilute samples and chemicals and to prepare standards. It will also present the basic quality assurance considerations required at any facility performing permit related testing. The QA discussion will include the use of blanks, replicates, split samples and performance standards, procedures for the systematic verification of instrument accuracy, initial demonstration of competency (IDC) requirements and other quality assurance related topics. The program will include lectures, demonstrations and hands on laboratory activities. The program has been submitted to the State Board for Waterworks and Wastewater Works Operators for approval.

Process Control and Sampling & Testing Workshops General Information

Course Locations:

DEQ - Piedmont Regional Office (RO)

The Piedmont Regional Office of the Department of Environmental Quality is located at 4949A Cox Road, Glen Allen Virginia. Persons registering for the workshops will receive directions and other pertinent information (i.e. nearby lodging and restaurants)

DEQ – West Central Regional Office (RO)

The West Central Regional Office of the Department of Environmental Quality is located at 3019 Peters Creek Rd in Roanoke Virginia. Persons registering for the workshops at this location will receive directions and other pertinent information (i.e. nearby lodging and restaurants)

Town of Onancock

The Town of Onancock is located in Accomack County, on Virginia's Eastern Shore. The class will be held in the Town Hall offices. Persons registering for the program will receive directions and other pertinent information (i.e. nearby lodging and restaurants).

Augusta County Government Center

The Augusta County Government Center is located in Verona, Virginia. Persons registering for the program will receive directions and other pertinent information (i.e. nearby lodging and restaurants).

Registration:

Only complete applications (registration form & payment) submitted to the Department's Office of Finance at the address shown on the form will be considered. Applicants are accepted on a "first come - first served" basis. Due to popularity of the programs no "walk-in" registrations can be accepted. To register for these programs complete the registration form on the back, attach the appropriate payment and send to the address shown on the form. You will receive notification of your acceptance and an information package containing directions and other pertinent information.

Fees:

Fees are based on the length of the program and the complexity of the topic area covered. Fees for each program are listed on the schedule. Fee must be submitted in the form of check or money order made payable to the Department of Environmental Quality prior to the start of the program. No purchase orders or credit cards can be accepted. State Agencies should contact the Department's Finance Office (804 698-4162) for IAT procedures.

Course Approval:

These courses are approved or have been submitted for approval by the Virginia Board for Waterworks and Wastewater Works Operators. Approved programs can, when applicable, be used as substitution for required operational experience.

Withdrawal, Substitution & Refund Policy:

Registrants who must withdraw should notify the Department as soon as possible. Substitutions are permitted anytime **prior to the start of class**. Registrants who withdraw from the program at least 5 business days prior to the start of the program will receive a full refund. Withdrawals made after this time will not be eligible for a refund.

Cancellation:

The Department reserves the right to cancel any program when there are insufficient registrations. People who register will be notified of the cancellation and will receive a refund.

Breaks and Lunches:

The registration fee does not include break refreshments or lunch.

Additional Information:

Contact: Jack Vanderland Office of Operator Training Phone: 804 698 4092 email: jwvanderland@deq.virginia.gov

Workshop Registration Form

(If more than one person from your facility is planning to attend, please use a separate form for each person registering)

Please check the workshop(s) you are registering for:

| | | | |
|-------|---|------------------------|-------|
| _____ | DEQ 15 Extended Aeration Package Plants West Central Regional Office – Roanoke VA | Feb 27 – March 1, 2007 | \$150 |
| _____ | DEQ 18 Introduction to BNR Town of Onancock WWTP, Onancock, Virginia | April 9 - 12, 2007 | \$100 |
| _____ | DEQ 18 Introduction to BNR Augusta County Government Center, Verona, VA | May 8 – 9, 2007 | \$100 |
| _____ | DEQ 19 Basic Lab Skills for Wastewater Operators Piedmont Regional Office, Glen Allen, Virginia | May 16 - 17, 2007 | \$100 |
| _____ | DEQ 18 Introduction to BNR West Central Regional Office, Roanoke, Virginia | June 5 - 6, 2007 | \$100 |

Registration Information

Name: _____

Mailing Address:

Street/PO Box: _____

City: _____ State: _____ Zip: _____

Daytime Phone: (____) - ____ - _____ Daytime Fax: (____) - ____ - _____

Email Address: _____

Employer Information:

Employer: _____

Supervisor: _____

Telephone: _____ FAX: _____

Email: _____

Mail registration form & payment to: Office of Finance
Department of Environment Quality
PO Box 1104
Richmond, VA 23218

Total payment enclosed \$ _____